



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,871	03/12/2002	Andre Haufe	7040-54	2940

21324 7590 08/28/2003  
HAHN LOESER & PARKS, LLP  
TWIN OAKS ESTATE  
1225 W. MARKET STREET  
AKRON, OH 44313

EXAMINER

GABOR, OTILIA

ART UNIT	PAPER NUMBER
----------	--------------

2878

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.		Applicant(s)	
	10/070,871		HAUFE, ANDRE	
	Examiner		Art Unit	
	Otilia Gabor		2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2002.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> | 6) <input type="checkbox"/> Other:  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 22, 27, 33, 36, 45-47 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Pantus (U. S. Patent 5499016).

Pantus discloses an apparatus and method for detecting a person or object moving towards the sensor device, the device comprising:

- a radiation sensor arrangement 11 for detecting electromagnetic radiation emanating from the person or object (passive detector)
- a parameter evaluation means comprising:
  - o a source of radiation 20 emitting light in the near infrared wavelength range in such a way as to fall onto the person or object approaching the passive detector 11
  - o detector 21 detecting the light reflected from the person or object moving towards the passive sensor 11
  - o a peak detector 29 to detect the peak amplitude signals from the detector 21 in order to deliver an additional signal to
- an evaluation unit 31 connected to the sensor arrangement which:

- first evaluates the normal variation in signal amplitudes over time of the radiation emanating from the source 20 and scattered from the detector arrangement window and forms a normal radiation pattern and
- then evaluates the variation in the signal amplitude over time to detect whether there is a significant change in the signal amplitude and
- then based on the detected signal variation it determines whether there is a person approaching the detector arrangement to sabotage it, or whether the detector was painted over or whether the detector was covered (i.e., the signal patterns are individualized to particular situations) and
- actuates an alarm 4 if it determines that the signal pattern is abnormal.

In operation, the detector arrangement uses two types of radiation detectors, a passive detector which detects the radiation emanating from an approaching object or person, where the detector is responsive to a radiation in the infrared or visible wavelength range (there is no limitation as to the type of radiation capable of being detected, see Col.2, lines 47-60) (claim 1) and a second active detector which responds to a radiation in the second wavelength range (infrared) which radiation is emanating from a source and is reflected by the approaching person. The pattern of the signal amplitude of the reflected signal, and the time variation thereof, is then compared to the original pattern or normal signal amplitude previously recorded and stored. A comparison between the two patterns determines whether the person approaching the detector arrangement is

Art Unit: 2878

an authorized person, is a person ready to sabotage the detector or if there is a covering plate on the detector, based on the signal amplitude which is different for different situations, i.e., the scattered signal pattern detected can be lower or higher than the normal signal pattern.

Regarding claim 3, the radiation source 20 emits a radiation in the wavelength range of between 350 to 4000 nm (see claim 3 in Col.10).

Regarding claim 27, the radiation source 20 emits a very specific radiation (pulsed at high intensity with very specific pulse repetition time), i.e., a coded signal which is then picked-up by a peak detector 29 to determine the proportion of the coded signals in the overall detected radiation.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 25, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pantus and further in view of Sheffer (U. S. Patent 5101194).

Pantus discloses the device for monitoring the movement of a person or object but he fails to add as the additional signal the degree of reflection from the person, however one of ordinary skill in the art would have been motivated to add this additional signal for an increased accuracy of the detected signal since as clearly shown by

Sheffer this constitutes a conventional method to differentiate between radiation reflected by a person and that reflected by an innocent pet or non-moving object. Sheffer includes in the process of signal evaluation, the degree of reflection of radiation from the person as the defining additional signal that is compared to a normal signal reflection pattern in order to determine whether the reflection pattern is one that corresponds to a moving person or a stationary object or pet (claim 25). The comparison is obtained from the intensity patterns of the reflected radiation (claim 29). See Figs. 1, 2 and Cols 3-8.

5. Claims 4-21, 23, 24, 26, 28, 30-32, 34, 35, 37-44, 48-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pantus and Sheffer and further in view of Vick et al. (U. S. Patent 5473942).

Pantus and Sheffer fail to disclose the measurement of the transit time as an additional signal to more precisely evaluate whether the person is moving towards or away from the detector. Measuring the transit time between emitted reflections is a conventional way, as clearly shown by Vick et al., of determining the location and number of objects in a particular space. One of ordinary skill in the art would have been motivated to include the transit time measurement of Vick et al. in the position determination method of Pantus and Sheffer since it adds to the more precise determination of the object or person movement in the surveilled space. Vick et al. uses the detection of the sound emanating from the objects as the additional signal wherefrom the transit time is calculated (claims 19, 50, 51) and the number of objects moving counted (claim 21):

Art Unit: 2878

Regarding claims 18, 20, 48, 49, 52, 53 none of the references include the detection of the scent or hair color as the additional signal, however these limitations are considered an obvious matter or design choice since the Applicant did not disclose that having these limitations solve any stated problems and since Pantus does not put any limitations to the source and second detector to be used and thus it would have been obvious to one of ordinary skill in the art to use any combination of signal type suitable for a particular application (i.e., if the distinction between the reflected signals is based on hair type or scent is desired then suitable detectors are used to detect these signals).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Otilia Gabor whose telephone number is 703-305-0384. The examiner can normally be reached on Monday-Friday between 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 703-308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-872-9319 for After Final communications.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Application/Control Number: 10/070,871

Art Unit: 2878

Page 7

og  
August 6, 2003

  
CONSTANTINE HANNAHER  
PRIMARY EXAMINER  
GROUP ART UNIT 2878